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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/199,776	11/25/1998	SANG-HAE LEE	P55394	4064

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EXAMINER

TRAN, HENRY N

ART UNIT	PAPER NUMBER
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2674

18

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/199,776

Applicant(s)

LEE, SANG-HAE

Examiner

HENRY N TRAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,6-9 and 21-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,6-9 and 21-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments, see pages 2-15 of the Response, filed 6/23/03 (Paper No. 17), with respect to the rejections of claims 2, 6-9 and 21-70 under *35 USC § 102* or *§ 103* have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, new grounds of rejection is made in view of Lien et al (U.S. Patent No. 5,386,567), Hendry et al (U.S. Patent No. 5,682,529) and Siefert (U.S. Patent No. 6,662,240) as follows.

Oath/Declaration

2. The original Declaration for the application is missing from the file wrapper. Please resubmit a replaced one.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the: "a connection unit", "first data", "second data", and "a resolution" recited in claims 2 and 6-9; "a first memory" and the "a second memory" recited in claims 38 and 45 must be shown or the features canceled from the claims. No new matter should be entered.

Note: Fig. 5 shows a different arrangement to that of the invention claimed in claim 38 as follows: "a memory" installed in the main body 100, and "a second memory" installed in the display 200.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing

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sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8, 9, 21, 22, 25-27, 30-32, 35-38, 40, 41, 43-47, 50 and 63-70 rejected under 35 U.S.C. 103(a) as being unpatentable over Lien et al (U.S. Patent No. 5,386,567, hereinafter referred to as "Lien") in view of Hendry et al (U.S. Patent No. 5,682,529, hereinafter referred to as Hendry).

Regarding claims 8, 9, 21, 26, 31, 36 and 43, Lien teaches a hot-plugging method for an apparatus, which comprises: a computer 1 (or system 22); an adapter, which is a video display

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unit 23 (or 24) being connected to the computer using a connection unit 9 after the computer is fully powered up and initialized or booted; a processing unit 4 (CPU 4) being installed in the computer for processing display data, detecting connection or interrupt signal, reading adapter information (read on "first data"), setting up the computer for providing a reconfigured system for transmitting data needed for displaying images on the respective display unit, see figs. 2, 7, 10 and 11; col. 2, lines 5-68; col. 3, line 1 to col. 6, line 68. However, Lien does not expressly teach the use of a video card coupled to display unit, and the processing unit determining whether the first data correspond to second data stored at the computer, storing the first data, and the transmitted data is the resolution data. Hendry teaches a system comprising a computer having a video card 14 coupled to a display unit 12, which is newly added to the system, for determining new display information (Hendry calls "new display state descriptor") for dynamically adjusting displayed information including resolution information in accordance with the newly added display unit, see fig. 1; col. 1, line 61 to col. 2, line 2; col. 3, line 29 to col. 4, line 35; col. 5, line 48 to col. 6, line 27; col. 7, lines 52-65. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Hendry in the Lien's device because this would provide an improved "hot plug" architecture, which is effectively and conveniently change the display configuration and provide optimal resolution to a display device of a computer system while the computer is running without restart the computer, see Hendry, col. 2, lines 45-55. By this rationale, claims 8, 9, 21, 26, 31, 36 and 43 are rejected.

Regarding claims 22, 25, 27, 30, 32, 35, 37-38, 40, 41, 44-47, 50 and 63-70, Lien also teaches: sensing of an interrupt, col. 4, line 66 to col. 5, line 1; a first memory 13 installed in the adapter 2 and a second memory 5 installed in the computer 1, see fig. 1; the display unit is a

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LCD, col. 6, lines 51-60; "hot plug" display unit to the computer after the completion of the booting process, col. 4, lines 62-65, and col. 6, line 61. Hendry also teaches: performing the display reconfiguration without restart or reboot the compute, col. 2, lines 45-55. Claims 22, 25, 27, 30, 32, 35, 37-38, 40, 41, 44-47, 50 and 63-70 are dependent upon the base claims 8, 9, 21, 26, 31, 36 and 43, and are therefore rejected on the same basis set forth in claims 8, 9, 21, 26, 31, 36 and 43, and by the reasons discussed above.

6. Claims 2, 6, 7, 23, 24, 28, 29, 33, 34, 39, 42, 48, 49 and 51-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lien in view of Hendry (hereinafter referred to as Lien-Hendry) as applied to claims 8, 9, 21, 22, 25-27, 30-32, 35-38, 40, 41, 43-47, 50 and 63-70 above, and further in view of Siefert (U.S. Patent No. 6,662,240).

Regarding claims 39, 42, 48 and 49, Lien-Hendry teaches generally all except for the claimed feature: "a polling operation periodically checking ...". Siefert teaches a computer system capable of automatically reconfiguring the computer peripherals and accessories; wherein, a polling operation periodically checking the peripherals and accessories for reconfiguring of necessary computer components, see col. 6, lines 9-21. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the polling operation as taught by Siefert in the Lien-Hendry system because this would effectively track installation and removal of components to and from the system. See Siefert, col. 5, lines 14-17. Claims 39, 42, 48 and 49 are dependent upon claims 36, 39, 43 and 47, and are therefore rejected on the same reasons set forth in claims 36, 39, 43 and 47, and by the reasons discussed above.

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Regarding claims 2, 6, 7, 23, 24, 28, 29, 33, 34 and 51-62, which are method claims corresponding to the rejected apparatus claims 36-50, and are therefore rejected on the same basis set forth for the apparatus claims 36-50 discussed above.

Response to Arguments

7. Applicant's arguments with respect to claims 2, 6-9 and 21-70 have been considered but are moot in view of the new grounds of rejection as discussed above.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. It is:

- Kimura (U.S. Patent No. 5,469,223) for teaching the use of a video card in a computer system for providing a desired display resolution.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HENRY N TRAN whose telephone number is 703-308-8410.

The examiner can normally be reached on M-F 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD A HJERPE can be reached on 703-305-4709. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Henry N. Tran

HENRY N TRAN
Primary Examiner
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10/8/04